

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Paul T. Watson, *et al.*

Serial No.: 10/028,153

Filed: December 20, 2001

For: SYSTEM AND METHOD FOR CONTENT TRANSMISSION NETWORK  
SELECTION

Group Art Unit: 2623

Examiner: Scott E. Beliveau

Confirmation No.: 3380

March 26, 2006

Mail Stop Appeal Brief-Patent

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**APPELLANT'S SUBSTITUTE BRIEF ON APPEAL UNDER 37 C.F.R. §41.37,  
UNDER 37 C.F.R. §41.41, AND UNDER MPEP §1208(I)**

Sir:

This Substitute Appeal Brief is filed in response to the Notice Of Panel Decision From Pre-Appeal Brief Review of October 13, 2006, and in response to the Examiner's Answer of February 1, 2007 (the Examiner's Answer). This Substitute Appeal Brief includes all remarks set forth in the Appeal Brief filed November 10, 2006, and additional remarks responsive to the Examiner's Answer of February 1, 2007.

It is not believed that an extension of time and/or additional fee(s) are required, beyond those that may otherwise be provided for in documents accompanying this paper. In the event, however, that an extension of time is necessary to allow consideration of this paper, such an extension is hereby petitioned under 37 C.F.R. Sec. 1.136(a). Any additional fees believed to be due may be charged to Deposit Account No. 50-0220.

**Real Party In Interest**

The real party in interest is assignee BellSouth Intellectual Property Corporation, a corporation of Delaware having a place of business at 824 Market Street, Suite 510, Wilmington, Delaware 19801.

**Related Appeals and Interferences**

The Appellant is aware of no appeals or interferences that would be affected by the present appeal.

### **Status of Claims**

In the Final Office Action of June 28, 2006 (the Final Action) and in the Examiner's Answer of February 1, 2007 (the Examiner's Answer), all pending claims (*i.e.*, Claims 1-30) from the Amendment of October 25, 2005, were rejected. The Appellant appeals the rejection of the subject matter of Claims 1-30 (as presented in the Amendment of October 25, 2005).

### **Status of Amendments**

The attached Appendix A presents the pending Claims 1-30 as amended in the Appellant's Amendment filed October 25, 2005, which has been formally entered at this time. No amendments have been filed since the Amendment of October 25, 2005.

### **Summary of Claimed Subject Matter**

The Appellant appeals the rejection of independent Claims 1, 16, and 19 as being patentable over U.S. Patent No. 6,766,526 to Ellis (the '526 patent) in view of International Publication No. WO 99/60790 also to Ellis (the '790 publication), and further in view of U.S. Patent No. 6,438,110 to Rai *et al.* (the Rai patent). The Appellant further appeals the rejection of dependent Claims 25, 27, and 29 as being patentable over the combination of the '526 patent, the '790 publication, and U.S. Patent No. 6,483,110 to Rai *et al.* (the Rai patent). The remaining dependent claims are patentable at least as depending from a patentable independent claim.

Independent Claim 1 (as presented in the Amendment of October 25, 2005) is directed to a method for content transmission network selection in a system coupled in parallel though both of a broadcast network and a broadband network to a viewer location wherein the broadcast network and the broadband network are different. Independent Claims 16 and 19 (as presented in the amendment of October 25, 2006) are respectively directed to a computer readable medium and to a system analogous to the method of Claim 1.

With respect to Claim 1, a method is recited for content transmission network selection in a system 120 coupled in parallel through both of a broadcast network 123 and a broadband network 121 to a viewer location 100 wherein the broadcast network 123 and the broadband network 121 are different. The method includes identifying video programming content to be transmitted to the viewer location 100 based on a transmission request. As shown for example in Figure 1, a content decision server 120b may receive a viewer's request

for a content item. *See* Application, page 4, lines 25-26. One of the broadcast network 123 or the broadband network 121 is selected for transmission of the video programming content to the viewer location 100 based upon characteristics of the transmission request comprising a future time at which the video programming content is requested to be viewed. The content decision server 120b may select a network over which to transmit the content. *See*, Application, page 4, lines 25-27. *See also*, Application, Figure 2, block 218, and page 5, lines 16-17. Moreover, the selection is based at least in part on an option of delivering the video programming content either at a time that the request is received or at the future time. *See*, Application, page 5, lines 21-23, page 7, lines 15-17, and page 8, lines 14-16. The video programming content is transmitted on the selected one of the broadcast network 123 or the broadband network 121 to the viewer location 100 coupled to both of the broadcast network 123 and the broadband network 121. As further shown in Figure 1, content media server 120c may queue and transmit the content to the selected transmission network. *See*, Application, page 4, lines 27-29. *See also*, Application, Figure 2, block 224, and page 7, lines 3-4.

Dependent Claim 25 depends from Claim 1 and thus includes all recitations of Claim 1 as discussed above. In addition, Claim 25 recites that the video programming content comprises first video programming content, wherein the transmission request comprises a first transmission request, and wherein selecting one of the broadcast network 123 or the broadband network 121 comprises selecting the broadcast network 123. In addition, second video programming content to be transmitted based on a second transmission request is identified, and the first and second transmission requests are different. The broadband network 121 is selected for transmission of the second video programming content based upon characteristics of the second transmission request comprising a second future time at which the second video programming content is requested to be viewed. The selection of the broadband network 121 is based at least in part on an option of delivering the second video programming content either at a time that the second request is received or at the future time. The second video programming content is transmitted on the broadband network 121.

With respect to Claim 16, a computer readable medium is recited for a transmission network selector 120 coupled in parallel through both of a broadcast network 123 and a broadband network 121 to a viewer location 100, and the broadcast network 123 and the broadband network 121 are different. The computer readable medium has stored thereon computer readable instructions to identify video programming content to be transmitted to the

viewer location 100 based on a transmission request. As shown for example in Figure 1, a content decision server 120b may receive a viewer's request for a content item. *See* Application, page 4, lines 25-26. In addition, the computer readable medium has stored thereon computer readable instructions to select one of the broadcast network 123 or the broadband network 121 for transmission of the video programming content to the viewer location 100 based upon characteristics of the transmission request comprising a future time at which the video programming content is requested to be viewed. The content decision server 120b may select a network over which to transmit the content. *See*, Application, page 4, lines 25-27. *See also*, Application, Figure 2, block 218, and page 5, lines 16-17. The selection is based at least in part on an option of delivering the video programming content either at a time that the request is received or at the future time. *See*, Application, page 5, lines 21-23, page 7, lines 15-17, and page 8, lines 14-16. The computer readable medium also has stored thereon computer readable instructions to transmit the video programming content on the selected one of the broadcast network 123 or the broadband network 121 to the viewer location 100. As further shown in Figure 1, content media server 120c may queue and transmit the content to the selected transmission network. *See*, Application, page 4, lines 27-29. *See also*, Application, Figure 2, block 224, and page 7, lines 3-4.

Dependent Claim 27 depends from Claim 16 and thus includes all recitations of Claim 1 as discussed above. In addition, Claim 27 recites that the video programming content comprises first video programming content, that the transmission request comprises a first transmission request, and that selecting one of the broadcast network 123 or the broadband network 121 comprises selecting the broadcast network 123. The computer readable medium also has stored thereon computer readable instructions to identify second video programming content to be transmitted based on a second transmission request wherein the first and second transmission requests are different. In addition, the computer readable medium has stored thereon computer readable instructions to select the broadband network 121 for transmission of the second video programming content based upon characteristics of the second transmission request comprising a second future time at which the second video programming content is requested to be viewed. The selection of the broadband network 121 being based at least in part on an option of delivering the second video programming content either at a time that the second request is received or at the future time. Moreover, the computer readable medium has stored thereon computer readable instructions to transmit the second video programming content on the broadband network 121.

With respect to Claim 19, a system is recited for content transmission network selection wherein the system is coupled in parallel through both of a broadcast network 123 and a broadband network 121 to a viewer location 100. Moreover, the broadcast network 123 and the broadband network 121 are different. The system includes a processor 420 operative to execute computer executable instructions and memory 424. The memory 424 has stored therein computer executable instructions to identify video programming content to be transmitted to the viewer location 100 based on a transmission request. As shown for example in Figure 1, a content decision server 120b may receive a viewer's request for a content item. *See* Application, page 4, lines 25-26. The memory 424 also has stored therein computer executable instructions to select one of the broadcast network 123 or the broadband network 121 for transmission of the video programming content to the viewer location 100 based upon characteristics of the transmission request comprising a future time at which the video programming content is requested to be viewed. The content decision server 120b may select a network over which to transmit the content. *See*, Application, page 4, lines 25-27. *See also*, Application, Figure 2, block 218, and page 5, lines 16-17. The selection is based at least in part on an option of delivering the video programming content either at a time that the request is received or at the future time. *See*, Application, page 5, lines 21-23, page 7, lines 15-17, and page 8, lines 14-16. In addition, the memory 424 has stored therein computer executable instructions to transmit the video programming content on one of the selected of the broadcast network 123 or broadband network 121 to the viewer location 100. As further shown in Figure 1, content media server 120c may queue and transmit the content to the selected transmission network. *See*, Application, page 4, lines 27-29. *See also*, Application, Figure 2, block 224, and page 7, lines 3-4.

Dependent Claim 29 depends from Claim 19 and thus includes all recitations of Claim 19 as discussed above. In addition, Claim 29 recites that the video programming content comprises first video programming content, that the transmission request comprises a first transmission request, and that selecting one of the broadcast network 123 or the broadband network 121 comprises selecting the broadcast network 123. In addition, the memory 424 has stored therein computer executable instructions to identify second video programming content to be transmitted based on a second transmission request wherein the first and second transmission requests are different. In addition, the memory 424 has stored therein computer executable instructions to select the broadband network 121 for transmission of the second video programming content based upon characteristics of the second transmission request

comprising a second future time at which the second video programming content is requested to be viewed. The selection of the broadband network 121 is based at least in part on an option of delivering the second video programming content either at a time that the second request is received or at the future time. Furthermore, the memory 424 has stored therein computer executable instructions to transmit the second video programming content on the broadband network 121.

### **Grounds of Rejection To Be Reviewed on Appeal**

The subject matter of Independent Claims 1, 16, and 19 stands rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,766,526 to Ellis (the '526 patent), in view of International Pub. No. WO 99/60790 to Ellis (the '790 publication), and in further view of U.S. Patent No. 6,438,110 to Rai et al. (the Rai patent). The subject matter of dependent Claims 25, 27, and 29 stands rejected as being unpatentable over the '526 patent in view of the '790 publication and further in view of the Rai patent.

In the following remarks, the Appellant will show that independent Claims 1, 16, and 19 are patentable over the '526 patent in view of the '790 publication and in view of the Rai patent, and that dependent Claims 2-15, 17-18, and 20-30 are patentable at least as per the patentability of Claims 1, 16, and 19 from which they depend.

The Appellant will also show that dependent Claims 25, 27, and 29 are separately patentable over the combination of the '526 patent, the '790 publication, and the Rai patent.

### **Arguments**

#### **I. Introduction to 35 U.S.C. § 103 Analysis**

The subject matter of pending Claims 1, 16, and 19 stands rejected under 35 U.S.C. §103(a) as being unpatentable over the '526 patent in view of '790 publication and further in view of the Rai patent; and the subject matter of pending Claims 25, 27, and 29 stands rejected under 35 U.S.C. §103(a) as being unpatentable over the '526 patent in view of '790 publication and further in view of the Rai patent. A determination under Section 103 that an invention would have been obvious to someone of ordinary skill in the art is a conclusion of law based on fact. *Panduit Corp. v. Dennison Mfg. Co.* 810 F.2d 1593, 1 U.S.P.Q.2d 1593 (Fed. Cir. 1987), cert. denied, 107 S.Ct. 2187. After the involved facts are determined, the decision maker must then make the legal determination of whether the claimed invention as a whole would have been obvious to a person having ordinary skill in the art at the time the

invention was unknown, and just before it was made. *Id.* at 1596. The United States Patent and Trademark Office has the initial burden under Section 103 to establish a *prima facie* case of obviousness. *In re Fine*, 837 F.2d 1071, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988).

To establish a *prima facie* case of obviousness, the prior art references cited in the rejection, when combined, must teach or suggest all the recitations of the claims, and there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to combine the reference teachings in the manner suggested. M.P.E.P. § 2143. The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. M.P.E.P. § 2143.01, citing *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990). As emphasized by the Court of Appeals for the Federal Circuit, to support combining references, evidence of a suggestion, teaching, or motivation to combine must be clear and particular, and this requirement for clear and particular evidence is not met by broad and conclusory statements about the teachings of references. *In re Dembiczak*, 50 U.S.P.Q.2d 1614, 1617 (Fed. Cir. 1999). Thus, in support of a Section 103 rejection, particular evidence from the prior art must be provided showing why a skilled artisan, with no knowledge of the claimed invention, would have combined the cited references in the manner claimed in the rejection. *In re Kotzab*, 55 U.S.P.Q.2d 1313, 1317 (Fed. Cir. 2000).

Furthermore, as recently stated by the Federal Circuit with regard to the selection and combination of references:

This factual question of motivation is material to patentability, and could not be resolved on subjective belief and unknown authority. It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to "[use] that which the inventor taught against its teacher." *W.L. Gore v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983). Thus the Board must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion....

*In re Sang Su Lee*, 277 F.3d 1338, 1343 (Fed. Cir. 2002).

The Appellant respectfully submits that the pending claims are patentable over the cited references because the cited combination fails to disclose or suggest all of the recitations of the pending claims, and because the reasoning behind such combination has not been established. The patentability of the pending claims is discussed in detail hereinafter.

As analyzed in detail below, the Appellant submits that Claims 1, 16, 19, 25, 27, and 29 are patentable over the cited art.

## **II. Claims 1, 16, 19, 25, 27, And 29 Are Patentable Over The Cited Art**

The subject matter of Claims 1, 16, and 19 stands rejected as being unpatentable over the '526 patent in view of the '790 publication and further in view of the Rai patent. The subject matter of Claims 25, 27, And 29 stands rejected as being unpatentable over the '526 patent in view of the '790 patent and further in view of the Rai patent. The combinations of the cited art, however, fail to teach or suggest the subject matter of Claims 1, 16, 19, 25, 27, and 29 for at least the reasons discussed below.

### **A. Independent Claims 1, 16, And 19 Are Patentable Over The Cited Art**

Independent Claims 1, 16, and 19 stand rejected under 35 U.S.C. Sec. 103(a) as being unpatentable over U.S. Patent No. 6,766,526 to Ellis (the '526 patent) in view of International PCT Patent Application No. WO 99/60790 to Ellis et al. (the '790 publication) and in further view of U.S. Patent No. 6,438,110 to Rai *et al.* (the Rai patent). The Appellant respectfully submits, however, that independent Claims 1, 16, and 19 are patentable for at least the reasons discussed below.

Claim 1, for example, recites a method for content transmission network selection in a system coupled in parallel through both of a broadcast network and a broadband network to a viewer location wherein the broadcast network and the broadband network are different. More particularly, the method includes:

- identifying video programming content to be transmitted to the viewer location based on a transmission request;
- selecting one of the broadcast network or the broadband network for transmission of the video programming content to the viewer location based upon characteristics of the transmission request comprising a future time at which the video programming content is requested to be viewed, the selection based at least in part on an option of delivering the video programming content either at a time that the request is received or at the future time; and
- transmitting the video programming content on the selected one of the broadcast network or the broadband network to the viewer location coupled to both of the broadcast and broadband networks. (Underline added.)

The Final Action concedes that the '526 patent "is silent with respect to particular features corresponding to the ordering of video programming to be subsequently delivered."

The Final Action, page 5, and Examiner's Answer, page 3. The Appellant respectfully submits that the '790 publication and/or the Rai patent fail to provide the missing teachings.

The '790 publication, for example, fails to teach or suggest selecting one of a broadcast network or a broadband network for transmission wherein the selection is based at least in part on an option of delivering the video programming content either at a time that the request is received or at the future time. Moreover, the Final Action concedes that:

it is unclear if the "selecting one of the broadcast network or a broadband network" necessarily takes time of transmission into account in association with its routing decisions so as to actively make a decision or choice between which network to route the data (Ellis et al. ('790): Col 11, lines 7-19).

Final Action, page 6, and Examiner's Answer, page 5. More particularly, the '790 publication states that:

If a selected video-on-demand program is not to start immediately, it may be fully or partially downloaded into local memory ... to lessen the bandwidth required to transmit the program and/or may be transmitted during a non-peak time.

The '790 publication, page 24. The combination of the '526 patent and '790 publication thus fails to teach or suggest selecting one of a broadcast network or a broadband network for transmission of video programming content, much less selecting one of a broadcast network or a broadband network based at least in part on an option of delivering the programming content either at a time that the request is received or at a future time.

The Rai patent also fails to provide the missing teachings. In particular, the Rai patent discusses a method of:

allocating reservations for network connections in advance in an attempt to ensure that the amount of traffic on a particular route of links between source and destination nodes will not exceed a maximum bitrate capacity of each link in that route at any time during the connection. (Underline added.)

The Rai patent, col. 6, lines 36-40. Nothing in the Rai patent, however, teaches or suggests selection of one of a broadcast network or a broadband network based at least in part on an option of delivering the programming content either at a time that the request is received or at a future time. In contrast, the Rai patent relates to "allocating reservations for network connections in advance." The Appellant thus submits that Claim 1 is patentable over the combination of the '526 patent, the '790 publication, and the Rai patent, because none of these references, taken alone or in combination, teaches or suggests selection of one of a

broadcast network or a broadband network based at least in part on an option of delivering the programming content either at a time that the request is received or at a future time.

The Appellant further submits that it would not be obvious to combine the Rai patent with the Ellis references (i.e., the '526 patent and the '790 publication) as suggested by the Final Action. With respect to the Rai patent, the Final Action states that:

In an analogous art pertaining to systems and methods for content transmission, the Rai et al. reference discloses actively making routing decisions or "selecting one of [a] broadcast network or [a] broadband network for transmission" based upon the schedule time for a requested transmission (Rai et al.: Figures 2-3; Col 5, Lines 48-61; Col 6, Line 30 – Col 7, Line 6; Col 7, Line 35 – Col 8, Line 11).

Final Action, page 6, and Examiner' Answer, page 5. The Appellant respectfully disagrees.

In particular, the Ellis '526 patent discusses television systems (the '526 patent, col. 3, line 11, and col. 10, line 13) with communications paths such as satellite links, telephone network links, cable or fiber optic links, microwave links, Internet links, or combinations of such paths (the '526 patent, col. 3, lines 23-28), and the Ellis '790 publication discusses a television program guide system. In contrast, the Rai patent states that:

The communications network 11 may comprise a computer network, for example a plurality of personal computers, workstations or the like at the node elements 12 connected by a local area network, comprising a link element. The link elements may comprise a wide area network, broadband network, e.g. ATM or SDH or the like. ...

Rai, col. 5, lines 44-49. The Appellant respectfully submits that it would not be obvious to somehow selectively combine aspects of the computer network of the Rai patent with the television systems of the Ellis references to somehow teach or suggest the method of Claim 1.

In further support of the rejection of Claim 1, the "Response To Arguments" section of the Final Action states that:

the Ellis ('526) clearly discloses ... that the end user terminal may be a computer (Col 4, Lines 3-13). Therefore, the network would clearly be recognizable as a type of 'computer network'. Furthermore, the Rai et al. reference provides no express teaching or suggestion which would limit its teachings to a particular type or composition of network, but rather explicitly states that the network will comprise a variety of types of equipment and that it is an object of the invention to allocate and schedule resources across a communications network (Col 1, Line 66 – Col 2; Col 3, Lines 52-60). Why wouldn't the Ellis network benefit from a method for allocating resources efficiently? The instant application is analogously in the same filed of endeavor and the combined Ellis et al. references are clearly utilize a form of communication network.

Final Action, page 3. As noted above, the Rai patent discusses "allocating reservations for network connections in advance..." Accordingly, the Rai patent teaches away from a "selection based ... on an option of delivering ... either at a time that the request is received or at the future time" as recited in Claim 1.

After conceding that the Ellis '590 patent is silent with respect to ordering of video programming, the Examiner's Answer further argues that Figure 8 of the Ellis '790 publication illustrates that:

the particular 'delivery' of video programming is "based at least in part on an option of delivering the video programming content either at a time that the request is received or at the future time" wherein the particular "transmission of the video programming content to the viewer location [is] based upon characteristics of the transmission request comprising a future time at which the video programming content is requested to be viewed" (Page 23, Lines 3 – Page 24, Line 10). Therefore, taken in combination, the references provide for the particular delivery of video programming either immediately or at a future time using either the 'broadcast' or 'broadband' network. One of these networks is necessarily utilized or 'selected' in order to distribute the requested programming or else the subscriber would be unable to receive and watch the requested video programming. The Rai reference was relied upon as further evidence to support intelligent 'selection', as set forth in the specification, between multiple networks when dealing with future delivery of the requested video programming.

Examiner's Answer, pages 12-13. Portions of the Ellis '790 publication relating to Figure 8 thereof state that:

If a selected video-on-demand program is not to start immediately, it may be fully or partially downloaded into local memory (*e.g.*, in home storage device 35) to lessen the bandwidth required to transmit the program and/or may be transmitted during a non-peak time. A price discount may be offered for such "advance ordering" of a program (not shown). (Underline added.)

Ellis '790 publication, page 24, lines 4-10. Accordingly, the Ellis '790 publication discusses lessening a bandwidth required to transmit a program, a time to transmit a program, and a price discount.

The Ellis '590 patent and the Ellis '790 publication (taken alone or in combination), however, fail to teach or suggest selecting one of a broadcast network or a broadband network with the selection based at least in part on an option of delivering the video programming content either at a time that the request is received or at the future time as recited in Claim 1. The Rai patent fails to provide the missing teachings relating to delivering video programming content as recited in Claim 1 and instead discusses a communications network for "distance learning or teleconference services" (*see*, the Rai

patent, col. 6, lines 35-36). Moreover, it would not be obvious to somehow selectively substitute and/or combine elements of a communications network for distance learning or teleconference services from the Rai patent with video-on-demand downloading of the Ellis '790 publication and/or with interactive television channel entry of the Ellis '526 patent.

The Examiner's Answer further presents a new issue in alleging that Claim 1 does not require selection based on an option of delivering programming content at a time that the request is received or at a future time. In particular, the Examiner's Answer states that:

it is noted that the feature upon which appellant relies (i.e., that the 'selection' is based upon an option of delivering the programming content at a time that the request is received) is not required in the rejected claim(s). As an initial point so as to alleviate any confusion that might arise, it is respectfully noted that the particular language of the 'selection step' is worded sort of backwards in so far as illustrated in Figure 2 of the application the particular 'option' [212] of when to provide a particular video programming is presented prior to the actual 'selection' [218]. The language of the claim that the actual 'selection' is based only on the 2<sup>nd</sup> option of delivering the video programming content at the future time and does not require selection based upon the alternative 1<sup>st</sup> option of delivering the video programming content at a time that the request is received. While the user may be provided with an option to choose either immediate or future delivery (through it's unclear that the immediate delivery option need even be provided given the alternative 'either' language), the claim requires that the 'selection' is actually being made only according to option for future delivery (as opposed to immediate delivery) since the 'transmission request comprises a future time at which the video programming content is requested to be viewed' (ex. a request for immediate delivery clearly would not include the future time as opposed to the time that the request is received).

Examiner's Answer, pages 13-14. The Appellant respectfully disagrees with the above cited analysis from the Examiner's Answer.

The Examiner's Answer appears to misread the operations set forth in Claim 1 which is a "method for content transmission network selection in a system coupled ... though a broadcast network and a broadband network to a viewer location" as recited in the preamble of the claim. Accordingly, the operations of Claim 1 are performed "in a system" responsive to a transmission request, as opposed to being performed at a viewer location or by a user at a viewer location as apparently alleged in the Examiner's Answer. While a user at a viewer location may specify in a transmission request a future time at which video programming content is requested to be viewed, the system (separate from the viewer location) receiving the transmission request performs the operation of selecting one of the broadcast network or the broadband network for transmission of the video programming content. Moreover, Claim 1 clearly recites "selecting one of the broadcast network or the broadband network" with "the

selection based at least in part on an option of delivering the video programming content either at a time that the request is received or at the future time...." Accordingly, the transmission request comprises a future time at which the video programming content is requested to be viewed, and the selection is based on an option of delivering either at the time that the request is received or at the future time. The Appellant thus submits that all elements of the claim must be considered with respect to patentability thereof.

In addition, the Examiner's Answer alleges that the Rai patent supports reservation scheduling at the time the request is made or immediately. *See*, Examiner's Answer, page 14. The Rai patent, however, actually teaches away from scheduling immediately if a future time has been requested because the Rai patent discusses a network used for distance learning or teleconferencing services (*see*, the Rai patent, col. 6, lines 35-36) where an immediate connection in response to a request including a future time would not be appropriate. In support of the Examiner's position, the Examiner's Answer cites Col. 10, Lines 51-58 of the Rai patent which actually state that:

In step 71 there is set the start time of CtSchedule to 0 and end time to 86400, eg corresponding to the number of seconds in a 24 hour day. In a further development of the best mode herein, a schedule of connections may be rolled forward in real time such that at any time connections over a forward moving look ahead period may be scheduled. A time period granularity need not be set on a per second basis, but may be varied by a user. (Underline added.)

The Rai patent, col. 10, lines 51-54. The Rai patent thus appears to discuss start times over a look ahead period with a start time of 0 and an end time of 86400 representing a connection over a whole day in the look ahead period. The Appellant thus submits that the Rai patent fails to teach or suggest a selection based on an option of delivering video programming content either at a time that a request is received or at a future time at which the video programming content is requested to be viewed. Moreover, it would not be obvious to combine elements of the Rai patent with either of the Ellis '790 publication and/or the Ellis '526 patent for the reasons discussed above.

For at least the reasons discussed above, the Appellant respectfully submits that Claim 1 is separately patentable over the combination of the '526 patent, the '790 publication, and the Rai patent. The Appellant further submits that independent Claims 16 and 19 are patentable for reasons similar to those discussed above with regard to Claim 1. In addition, dependent Claims 2-15, 17-18, and 20-30 are patentable at least as per the patentability of Claims 25, 27, and 29 from which they depend.

**B. Dependent Claims 25, 27, And 29 Are Patentable Over The Cited Art**

Dependent Claims 25, 27, and 29 stand rejected under 35 U.S.C. Sec. 103(a) as being unpatentable over the '526 patent in view of the '790 publication, and further in view of U.S. Patent No. 6,438,110 to Rai et al. (the Rai patent). The Appellant respectfully submits, however, that dependent Claims 25, 27, and 29 are patentable for the reasons discussed above with respect to independent Claims 1, 16, and 19 from which they depend. The Appellant further submits that dependent Claims 25, 27, and 29 are separately patentable for at least the additional reasons discussed below.

Claim 25, for example, depends from Claim 1, and thus includes all recitations of Claim 1 as discussed above. In addition, Claim 25 recites that the video programming content comprises first video programming content, that the transmission request comprises a first transmission request, and that selecting one of the broadcast network or the broadband network comprises selecting the broadcast network. Claim 25 also includes:

- identifying second video programming content to be transmitted based on a second transmission request wherein the first and second transmission requests are different;

- selecting the broadband network for transmission of the second video programming content based upon characteristics of the second transmission request comprising a second future time at which the second video programming content is requested to be viewed, the selection of the broadband network being based at least in part on an option of delivering the second video programming content either at a time that the second request is received or at the future time; and

- transmitting the second video programming content on the broadband network.

Moreover, Claim 1 (from which Claim 25 depends) states that "the broadcast network and the broadband network are different." In support of the rejection of Claim 25, the Final Action states that:

Claims 25, 27, and 29 are rejected in view of the combined references for the implicit scenario wherein the user of the Ellis et al. ('790) submits a "first transmission request" for a "first programming content" (ex. "The Truman show") and at a later point in time submits a "second transmission request" for a "second video content" (ex. "X-Files The Movie"). The combined Ellis references provide heterogeneous distribution network comprising both a "broadcast" and a "broadband network". The Rai et al. reference discloses that the particular selection of a particular network including both "broadcast" and a "broadband networks" wherein the particular selection between networks depends on the scheduled time of the request. Taken in combination, the Rai et al. reference teaches that the particular of scheduling of video programming occurs using either of the "broadband" or "broadcast networks" of the

combined Ellis references in order to optimally deliver resources using the available networks.

Final Action, page 8, and Examiner's Answer, page 7.

Accepting for the sake of argument that the combined Ellis references provide heterogeneous distribution comprising both broadcast and broadband networks which are different, it would not be obvious combine the Rai patent with the Ellis references as suggested by the Examiner. In particular, the Ellis '526 patent discusses television systems (the '526 patent, col. 3, line 11, and col. 10, line 13) with communications paths such as satellite links, telephone network links, cable or fiber optic links, microwave links, Internet links, or combinations of such paths (the '526 patent, col. 3, lines 23-28), and the Ellis '790 publication discusses a television program guide system. In contrast, the Rai patent states that:

The communications network 11 may comprise a computer network, for example a plurality of personal computers, workstations or the like at the node elements 12 connected by a local area network, comprising a link element. The link elements may comprise a wide area network, broadband network, e.g. ATM or SDH or the like. ...

Rai, col. 5, lines 44-49. The Appellant respectfully submits that it would not be obvious to somehow selectively combine aspects of the computer network of the Rai patent with the television systems of the Ellis references to somehow teach or suggest the method of Claim 25.

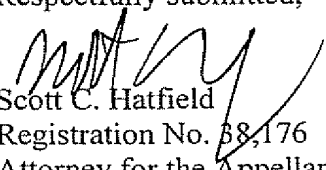
For at least the reasons discussed above, the Appellant respectfully submits that Claim 25 is separately patentable over the combination of the '526 patent, the '790 publication, and the Rai patent. The Appellant further submits that dependent Claims 27 and 29 are separately patentable for reasons similar to those discussed above with regard to Claim 25. In addition, dependent Claims 26, 28, and 30 are patentable at least as per the patentability of Claims 25, 27, and 29 from which they depend.

### **III. Conclusion**

In summary, the Appellant respectfully submits that the cited art fails to teach or suggest all recitations of independent Claims 1, 16, and 19 and dependent Claims 25, 27, and 29 for at least the reasons discussed above. The remaining dependent claims are patentable at least as depending from patentable independent Claims 1, 16, and 19. Accordingly, the Appellant respectfully requests reversal of the rejections of the subject matter of Claims 1-30.

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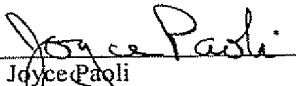
Respectfully submitted,

  
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CERTIFICATION OF TRANSMISSION

I hereby certify that this correspondence is being transmitted electronically to the U.S. Patent and Trademark Office on March 26, 2007.

  
Joyce Paoli

### **Appendix A: Claims**

1. (rejected) A method for content transmission network selection in a system coupled in parallel through both of a broadcast network and a broadband network to a viewer location wherein the broadcast network and the broadband network are different, the method comprising the steps of:

identifying video programming content to be transmitted to the viewer location based on a transmission request;

selecting one of the broadcast network or the broadband network for transmission of the video programming content to the viewer location based upon characteristics of the transmission request comprising a future time at which the video programming content is requested to be viewed, the selection based at least in part on an option of delivering the video programming content either at a time that the request is received or at the future time; and

transmitting the video programming content on the selected one of the broadcast network or the broadband network to the viewer location coupled to both of the broadcast and broadband networks.

2. (rejected) A method as in claim 1, wherein the step of identifying content to be transmitted based on a transmission request comprises the steps of:

transmitting a list of available content items over the broadband network; and  
receiving from the broadband network requests for content items.

3. (rejected) A method as in claim 22, wherein said step of selecting one of the broadcast network or the broadband network comprises the steps of:

determining whether there is sufficient available bandwidth in the broadcast network to transmit the content;

if there is not sufficient available bandwidth in the broadcast network, then  
determining to transmit the content over the broadband network;

if there is a sufficient available bandwidth in the broadcast network, then determining whether the cost of transmitting the content over the broadcast network exceeds the cost of transmitting the content over the broadband network;

if the cost of transmitting the content over the broadcast network exceeds the cost of transmitting the content over the broadband network, then determining to transmit the content over the broadband network; and

if the cost of transmitting the content over the broadcast network does not exceed the cost of transmitting the content over the broadband network, then determining to transmit the content over a broadcast network.

4. (rejected) A method as in claim 3, wherein said step of determining whether there is sufficient available bandwidth in the broadcast network to transmit the content comprises the steps of:

determining the available bandwidth in the broadcast network;

determining the minimum transfer rate for the content;

determining whether the minimum transfer rate for the content exceeds the available bandwidth in the broadcast network;

if the minimum transfer rate for the content exceeds the available bandwidth in the broadcast network, then determining that there is not sufficient available bandwidth in the broadcast network to transmit the content; and

if the minimum transfer rate for the content does not exceed the available bandwidth in the broadcast network, then determining that there is sufficient available bandwidth in the broadcast network to transmit the content.

5. (rejected) A method as in claim 3, wherein said step of determining whether the cost of transmitting the content over the broadcast network exceeds the cost of transmitting the content over the broadband network comprises the steps of:

determining a cost of transmission per unit of data over the broadband and broadcast networks;

determining the total number of units of data in the content; and

determining if the product of the total number of units of data in the content and cost of transmission per unit of unit of data over the broadcast network exceeds the product of the total number of units of data in the content and cost of transmission per unit of data over the broadband network.

6. (rejected) A method as in claim 1, wherein said broadcast network comprises one of a direct to home satellite network, a terrestrial wireless network, and a cable network.

7. (rejected) A method as in claim 1, wherein said broadband network comprises one of a digital subscriber line network and a cable network.

8. (previously presented) A method as in claim 1, wherein said characteristics of the transmission request further comprise at least one of the geographic location to which the content is to be transmitted and a dollar amount the viewer is willing to pay for the content.

9. (previously presented) A method as in claim 22, wherein said characteristics of the content to be transmitted comprise at least one of the following: size of the content, duration of the content, the total number of requests for the content, and the minimum transmission rate on a given network for the content.

10. (previously presented) A method as in claim 22, wherein said characteristics of the broadcast network comprise at least one of the available bandwidth on the network, the geographic boundaries of the network, and the cost of transmission at a given time of day on the network.

11. (previously presented) A method as in claim 22, wherein said characteristics of the broadband network comprises of at least one of the following: available bandwidth on the network, geographic boundaries of the network; and cost of transmission at a given time of day on the network.

12. (rejected) A method as in claim 1, further comprising the step of transmitting over a broadcast network a notification of the transmission characteristics.

13. (rejected) A method as in claim 12, wherein said transmission characteristics comprise an identification of a transmission network.

14. (rejected) A method as in claim 1, wherein said step of transmitting the content on one of the broadcast network or the broadband network comprises transmitting the content

on one of the broadcast network or the broadband network at a time prior to the future time at which the content is requested to be viewed.

15. (rejected) A method as in claim 1, wherein said step of transmitting the content on one of the broadcast network or the broadband network comprises transmitting the content on one of the broadcast network or the broadband network at the future time at which the content is requested to be viewed.

16. (rejected) A computer readable medium for a transmission network selector coupled in parallel through both of a broadcast network and a broadband network to a viewer location wherein the broadcast network and the broadband network are different, the computer readable medium having stored thereon computer readable instructions for performing the following steps:

identifying video programming content to be transmitted to the viewer location based on a transmission request;

selecting one of the broadcast network or the broadband network for transmission of the video programming content to the viewer location based upon characteristics of the transmission request comprising a future time at which the video programming content is requested to be viewed, the selection based at least in part on an option of delivering the video programming content either at a time that the request is received or at the future time; and

transmitting the video programming content on the selected one of the broadcast network or the broadband network to the viewer location.

17. (rejected) The computer readable medium of claim 23, wherein said instructions for performing the step of selecting one of the broadcast network or the broadband network comprise instructions for performing the following steps:

determining whether there is sufficient available bandwidth in the broadcast network to transmit the content;

if there is not sufficient available bandwidth in the broadcast network, then determining to transmit the content over a broadband network;

if there is a sufficient available bandwidth in the broadcast network, then determining whether the cost of transmitting the content over the broadcast network exceeds the cost of transmitting the content over the broadband network;

if the cost of transmitting the content over the broadcast network exceeds the cost of transmitting the content over the broadband network, then determining to transmit the content over a broadband network; and

if the cost of transmitting the content over the broadcast network does not exceed the cost of transmitting the content over the broadband network, then determining to transmit the content over the broadcast network.

18. (rejected) The computer readable medium of claim 16 having stored thereon computer readable instructions for further performing the step of transmitting over the broadcast network a notification of the transmission characteristics.

19. (rejected) A system for content transmission network selection wherein the system is coupled in parallel through both of a broadcast network and a broadband network to a viewer location wherein the broadcast network and the broadband network are different, the system comprising:

a processor operative to execute computer executable instructions; and

memory having stored therein computer executable instructions for performing the following steps:

identifying video programming content to be transmitted to the viewer location based on a transmission request;

selecting one of the broadcast network or the broadband network for transmission of the video programming content to the viewer location based upon characteristics of the transmission request comprising a future time at which the video programming content is requested to be viewed, the selection based at least in part on an option of delivering the video programming content either at a time that the request is received or at the future time; and

transmitting the video programming content on one the selected of the broadcast network or broadband network to the viewer location.

20. (rejected) The system of claim 24, wherein said computer executable instructions for performing the step of selecting one of the broadcast network or the broadband network comprise computer executable instructions for performing the following steps:

determining whether there is sufficient available bandwidth in the broadcast network to transmit the content;

if there is not sufficient available bandwidth in the broadcast network, then determining to transmit the content over a broadband network;

if there is a sufficient available bandwidth in the broadcast network, then determining whether the cost of transmitting the content over the broadcast network exceeds the cost of transmitting the content over the broadband network;

if the cost of transmitting the content over the broadcast network exceeds the cost of transmitting the content over the broadband network, then determining to transmit the content over a broadband network; and

if the cost of transmitting the content over the broadcast network does not exceed the cost of transmitting the content over the broadband network, then determining to transmit the content over a broadcast network.

21. (rejected) The system of claim 19, wherein said memory has stored therein computer executable instructions for further performing the step of transmitting over the broadcast network a notification of the transmission characteristics.

22. (rejected) The method of claim 1, comprising selecting one of the broadcast network or the broadband network based upon the characteristics of the transmission request and at least one of the following: characteristics of the content to be transmitted, characteristics of the broadcast network, and characteristics of the broadband network.

23. (rejected) The computer readable medium of claim 16, comprising computer readable instructions for selecting one of the broadcast network or the broadband network based upon the characteristics of the transmission request and at least one of the following: characteristics of the content to be transmitted, characteristics of the broadcast network, and characteristics of the broadband network.

24. (rejected) The system of claim 19, comprising computer executable instructions for selecting one of the broadcast network or the broadband network based upon the characteristics of the transmission request and at least one of the following: characteristics of the content to be transmitted, characteristics of the broadcast network, and characteristics of the broadband network.

25. (rejected) A method as in Claim 1 wherein the video programming content comprises first video programming content, wherein the transmission request comprises a first transmission request, and wherein selecting one of the broadcast network or the broadband network comprises selecting the broadcast network, the method further comprising:

identifying second video programming content to be transmitted based on a second transmission request wherein the first and second transmission requests are different;

selecting the broadband network for transmission of the second video programming content based upon characteristics of the second transmission request comprising a second future time at which the second video programming content is requested to be viewed, the selection of the broadband network being based at least in part on an option of delivering the second video programming content either at a time that the second request is received or at the future time; and

transmitting the second video programming content on the broadband network.

26. (rejected) A method according to Claim 25 wherein transmitting the first video programming content on the broadcast network comprises transmitting the first video programming content on the broadcast network without using the Internet, and wherein transmitting the second video programming content on the broadband network comprises transmitting the second video programming content on the broadband network including the Internet.

27. (rejected) The computer readable medium of Claim 16 wherein the video programming content comprises first video programming content, wherein the transmission request comprises a first transmission request, and wherein selecting one of the broadcast network or the broadband network comprises selecting the broadcast network, the computer

readable medium further having stored thereon computer readable instructions for performing the following steps:

- identifying second video programming content to be transmitted based on a second transmission request wherein the first and second transmission requests are different;

- selecting the broadband network for transmission of the second video programming content based upon characteristics of the second transmission request comprising a second future time at which the second video programming content is requested to be viewed, the selection of the broadband network being based at least in part on an option of delivering the second video programming content either at a time that the second request is received or at the future time; and

- transmitting the second video programming content on the broadband network.

28. (rejected) The computer readable medium of Claim 27 wherein transmitting the first video programming content on the broadcast network comprises transmitting the first video programming content on the broadcast network without using the Internet, and wherein transmitting the second video programming content on the broadband network comprises transmitting the second video programming content on the broadband network including the Internet.

29. (rejected) The system of Claim 19 wherein the video programming content comprises first video programming content, wherein the transmission request comprises a first transmission request, and wherein selecting one of the broadcast network or the broadband network comprises selecting the broadcast network, the memory further having stored therein computer executable instructions for performing the following steps:

- identifying second video programming content to be transmitted based on a second transmission request wherein the first and second transmission requests are different;

- selecting the broadband network for transmission of the second video programming content based upon characteristics of the second transmission request comprising a second future time at which the second video programming content is requested to be viewed, the selection of the broadband network being based at least in part on an option of delivering the second video programming content either at a time that the second request is received or at the future time; and

- transmitting the second video programming content on the broadband network.

30. (rejected) The system of Claim 29 wherein transmitting the first video programming content on the broadcast network comprises transmitting the first video programming content on the broadcast network without using the Internet, and wherein transmitting the second video programming content on the broadband network comprises transmitting the second video programming content on the broadband network including the Internet.

### **Appendix B: Evidence**

No evidence pursuant to 37 CFR Sec. 1.130, Sec. 1.131, or Sec. 1.132 is relied upon by Appellant in the appeal.

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### **Appendix C: Related Proceedings**

There are no related proceedings pursuant to 37 C.F.R. Sec. 41.37.